

AMENDMENTS

Please amend the claims as follows:

1-24 (cancelled)

25. (currently amended) In a mesh network having a plurality of nodes for providing wireless access to a plurality of wireless end user devices including a ~~source-first~~ device and a ~~destination-second~~ device, the ~~source-first~~ device being provided wireless access by a ~~source-roaming node~~ and being associated with a ~~source-first~~ home node different from the ~~source-roaming node~~, the ~~destination-second~~ device being provided wireless access by a ~~destination-second roaming node~~ and being associated with a second home node different from the second roaming node, the second roaming node and the second home node each being different from the ~~source-roaming node~~ and the ~~source-first~~ home node, the plurality of nodes including a gateway node for tracking the wireless end user devices and for relaying data traffic between the mesh network and another network external to the mesh network, a method of routing data traffic between the ~~source-second~~ device and the ~~destination-first~~ device when the first device moves into a coverage area of a first roaming node different from each of the first home node and the second roaming node, the method comprising:

receiving only at the gateway node a notification from the first roaming node that the first device has moved into the coverage area of the first roaming node;

receiving only at the first home node a notification from the gateway node that the first device has moved into the coverage area of the first roaming node;

receiving the data traffic from the ~~source-second~~ roaming node at the ~~destination-first~~ home node, the data traffic originating from the ~~source-second~~ device and being destined for the ~~destination-first~~ device;

forwarding the data traffic from the first home node to the first roaming node;

determining at the first roaming node that the data traffic was received from the ~~source-roaming-second roaming node~~ at the ~~destination node~~;

determining that the data traffic originated from the ~~source-second~~ device and is destined for the ~~destination-first~~ device;

reprogramming the ~~destination-first roaming node~~ to route any further data traffic destined for the ~~source-second device~~ to the ~~source-second roaming node~~; and forwarding the data traffic to the ~~destination-first device~~ wherein any further data traffic destined for the ~~source-second device~~ at the second roaming node from the ~~destination-device-first roaming node~~ is routed to the ~~source-second device~~ without involving the ~~source-second home node~~ or the gateway node.

26. (cancelled)

27. (currently amended)The method according to claim 25 wherein an address of the ~~source-second device~~ is derived from an address of the ~~source-second home node~~.

28. (currently amended)The method according to claim 27 wherein the address of the ~~source-second device~~ is an IP address of the ~~source-second device~~, the address of the ~~source second home node~~ is an IP address of the ~~source-second home node~~, whereby the IP address of the ~~source-second device~~ is derived from the IP address of the ~~source-second home node~~.

29. (currently amended)The method according to claim 27 wherein routing any further data traffic destined for the ~~source-second device~~ to the ~~source-second roaming node~~ comprises associating the further data traffic with an address of the ~~source-second roaming node~~ which is different from the address of the ~~source-second home node~~.

30. (currently amended)The method according to claim 29 wherein associating the further data traffic with the address of the ~~source-second roaming node~~ comprises repackaging the further data traffic using the address of the ~~source-second roaming node~~.

31. (cancelled)

32. (currently amended)The method according to claim 25 wherein any further data traffic destined for the ~~source-second~~ device which is received by the ~~source-second~~ roaming node is forwarded by the ~~source-second~~ roaming node to the ~~source-second~~ device.

33. (currently amended)The method according to claim 25 wherein determining that the data traffic was received from the ~~source-second~~ roaming node at the ~~destination-first~~ roaming node comprises determining an association between the data traffic and an address of the ~~source-second~~ roaming node.

34. (currently amended)The method according to claim 25 wherein determining that the data traffic originated from the ~~source-second~~ device and is destined for the ~~destination-first~~ device comprises: determining an association between the data traffic and an address of the ~~source-second~~ device; and determining an association between the data traffic and an address of the ~~destination-first~~ device.

35. (cancelled)

36. (cancelled)

37. (cancelled)

38. (cancelled)

39. (cancelled)

40. (cancelled)

41. (cancelled)

42. (currently amended) A mesh network having a plurality of nodes for providing wireless access to a plurality of wireless end user devices including a ~~source-first~~ device and a ~~destination-second~~ device, the plurality of nodes including:

a ~~source-first~~ roaming node for providing wireless access to the ~~source-first~~ device when the first device moves into a coverage area of the first roaming node, the ~~providing~~ including receiving data traffic from the ~~source-first~~ device;

a gateway node for tracking the wireless end user devices and for relaying data traffic between the mesh network and another network external to the mesh network, the gateway node being further for receiving a notification from the first roaming node that the first device has moved into the coverage area of the first roaming node, the first roaming node being further for sending the notification only to the gateway node;

a ~~source-first~~ home node associated with the ~~source-first~~ device, the ~~source-first~~ home node being different from the ~~source-first~~ roaming node, the first home node being for receiving from the gateway node a notification that the first device has moved into the coverage area of the first roaming node, the gateway node being further for sending the notification only to the first home node;

a second home node associated with the second device; and

a ~~destination-second~~ roaming node different from the ~~source-first~~ roaming node and the ~~source-second~~ home node, the second roaming node being for receiving from the second device data traffic destined for the first device, and for forwarding the data traffic to the first home node, the first home node being further for forwarding the data traffic to the first roaming node, the first roaming node being further for:

~~destination node for providing wireless access to the destination device including:~~

~~receiving at the destination node data traffic from the source roaming node, the data traffic originating from the source device and being destined for the destination device;~~

~~determining that the data traffic was received from the source-second roaming node at the destination node;~~

~~determining that the data traffic originated from the source-second device and is destined for the destination-first device;~~

reprogramming the ~~destination-first roaming~~ node to route further data traffic destined for the ~~source-second~~ device to the ~~source-second~~ roaming node; and forwarding the data traffic to the ~~destination-first~~ device wherein any further data traffic destined for the ~~source-second~~ device at the second roaming node from the ~~destination-device-first roaming node~~ is routed to the ~~source-second~~ device without involving the ~~source-second home node~~ or the gateway node.

43. (cancelled)

44. (currently amended) The mesh network according to claim 42 wherein an address of the ~~source-second~~ device is derived from an address of the ~~source-second~~ home node.

45. (currently amended) The mesh network according to claim 44 wherein routing any further data traffic destined for the ~~source-second~~ device to the ~~source-second~~ roaming node comprises associating the further data traffic with an address of the ~~source-second~~ roaming node which is different from the address of the ~~source-second~~ home node.

46. (currently amended) The ~~destination-node-mesh network~~ according to claim 45 wherein associating the further data traffic with the address of the ~~source-second~~ roaming node comprises repackaging the further data traffic using the address of the ~~source-second~~ roaming node.